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EXAMINER
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WINTER, JOHN M

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/763,917  
Filing Date: July 03, 2001  
Appellant(s): IU ET AL.

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Nathaniel McQueen  
(#53,308)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 18, 2011 appealing from the Office action mailed February 18, 2010.

**(1) Real Party in Interest**

The Examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The Examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 19-30 and 62-77 are pending,

Claims 19-30 and 62-77 are rejected

**(4) Status of Amendments After Final**

The Examiner has no comment on the Appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The Examiner has no comment on the summary of claimed subject matter contained in the brief.

Art Unit: 3685

**(6) Grounds of Rejection to be Reviewed on Appeal**

The Examiner has no comment on the Appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the Examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The Examiner has no comment on the copy of the appealed claims contained in the Appendix to the Appellant's brief.

**(8) Evidence Relied Upon**

US 6,363,159	Rhoads	3/2002
US 5,959,717	Chaum	9/1999
US 6,182,218	Saito	1/2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 112***

Claims 19-30 and 62-77 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention,

Claim 19 recites the limitation “not readily visible by the viewer” does not quantify an amount of “warping” and is therefore indefinite.

Claims 20-30 and 62-77 are either dependant upon claim 19 or contain similar limitations and are rejected for at lest the same reasons.

***Claim Rejections - 35 USC § 103***

Claims 19-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads, (U.S. Patent No 6,363,159) in view of Saito (U.S. Patent 6,182,218) and further in view of Chaum (U.S. Patent 5,959,717).

As per claims 19-30:

Rhoads (‘159) discloses a playback unit, comprising:

an input for receiving an encoded data stream bearing a video image;

(Figures 2 and 3 -- Examiner notes that that the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform (MPEP 2114 and *Ex parte Masham*, 2 USPQ2d 1647 (197))).

Art Unit: 3685

means for imparting a prescribed transformation to the video image (Column 28, lines 24-54, column 64, lines 15-30) for warping the video image in a manner, and by an amount, not readily visible to a viewer (Column 26; lines 1-28, Examiner notes that Rhoads states that the "break" in the signal is not noticable using a high end sound system)

Rhoads ('159) does not explicitly disclose "a decoder for decoding the encoded data stream;". Saito ('218) discloses "a decoder for decoding the encoded data stream;,"(Figure 1, column 8, lines 15-18-- Examiner notes that that the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform (MPEP 2114 and *Ex parte Masham*, 2 USPQ2d 1647 (1987))). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the Rhoads ('159)'s method with Saito's teaching in order to enforce digital rights management systems.

Rhoads ('159) does not explicitly disclose such that a composite video image produced by multiple video playback units will be distorted and the distortion of the composite video image can be seen by the viewer, wherein said warping changes with time during playback of the video image ". Chaum ('717) discloses "such that a composite video image produced by multiple video playback units will be distorted and the distortion of the composite video image can be seen by the viewer, (Column 8, lines 57-67 – column 9 lines 1-9) wherein said warping changes with time during playback of the video image " (Column 6, lines 43-63).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine the Rhoads ('159)'s in view of Saito's teachings with Chaum ('717) teaching in order to enforce digital rights management systems.

As per claims 20-30

The Examiner states that Chaum discloses the claimed feature of wherein said warping changes with time during playback of the video image ” (Column 6, lines 43-63). The substitution of another old and well known warping process such as “ warping is selected randomly from among a plurality of mapping functions pre- stored in a playback unit; or the image is warped by compressing spacing between pixels in one direction and expanding spacing in another direction; or said warping changes upon scene change of said video image or warping is defined by a geometric transformation; or warping is derived by backward warping of a two-dimensional geometric transformation of said video image; or warping is performed by a three-dimensional transformation of said video image; or wherein said warping is described by a linear function or warping is described by a quadratic function or warping is described by a spline function; or applying a motion vector to pixels of said video image for image transformation or performing different image transformations in different regions of said video image" as disclosed in claims 21-30 is no more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement. Ex parte Smith, 83 USPQ2d 1509 (Bd. Pat. App. & Int.

***Claim Rejections - 35 USC § 103***

Claims 62-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads, (U.S. Patent No 6,363,159) in view of Chaum (U.S. Patent 5,959,717).

As per claim 62:

Rhoads ('159) discloses a method for processing an audio or video data stream containing digital watermark data, comprising:

utilizing a playback unit for playing out information contained in the audio or video data stream; (Column 28, line 55 – column 29, line 7)

during playing by the playback unit, altering the audio or video information by applying to the audio or video data stream a predetermined mapping function associated with the playback unit to distort the audio or video, (Column 28, lines 24-54)

Rhoads ('159) does not explicitly disclose “ wherein audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units, is distorted and the distortion of the produced audio information can be heard by a listener of the produced audio information or the distortion of the produced video information can be seen by a viewer of the produced video information, said video information comprises a video image embedded in a video data stream, and said video image is distorted during playback by a playback unit in accord with the predetermined mapping function by an amount not readily visible to the viewer, but such that a video image produced by combining multiple video data streams reproduced by multiple different playback units is distorted and the distortion can be seen by the viewer”.



Art Unit: 3685

Chaum ('717) discloses "wherein audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units, is distorted and the distortion of the produced audio information can be heard by a listener of the produced audio information or the distortion of the produced video information can be seen by a viewer of the produced video information, said video information comprises a video image embedded in a video data stream, and said video image is distorted during playback by a playback unit in accord with the predetermined mapping function by an amount not readily visible to the viewer, but such that a video image produced by combining multiple video data streams reproduced by multiple different playback units is distorted and the distortion can be seen by the viewer, (Column 8, lines 57-67 – column 9 lines 1-9) wherein said warping changes with time during playback of the video image" (Column 6, lines 43-63). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the Rhoads ('159)'s with Chaum ('717) teaching in order to enforce digital rights management systems.

Examiner notes that the claimed feature of "wherein audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units, is distorted and the distortion of the produced audio information can be heard by a listener of the produced audio information or the distortion of the produced video information can be seen by a viewer of the produced video information, said video information comprises a video image embedded in a video data stream, and said video image is distorted during playback by a playback unit in accord with the predetermined mapping function by an amount not readily visible to the viewer, but such

Art Unit: 3685

that a video image produced by combining multiple video data streams reproduced by multiple different playback units is distorted and the distortion can be seen by the viewer, wherein said warping changes with time during playback of the video image” merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim. (Texas Instruments Inc. v. International Trade Commission 26, USPQ2d 1010 (Fed. Cir. 1993); Griffin v. Bertina, 62 USPQ2d 1431 (Fed. Cir. 2002); Amazon.com Inc. v. Barnesandnoble.com Inc., 57 USPQ2d 1747 (CAFC 2001)

The Examiner further notes that optional or conditional elements do not narrow the claims because they can always be omitted. See e.g. MPEP §2106 II C: “Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.] ” As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.

As per claim 63,

Rhoads (‘159) discloses the method in accordance with claim 62

Rhoads (‘159) does not explicitly disclose “wherein said mapping function changes with time during playback of the video image by a playback unit”. Chaum (‘717) discloses “wherein said mapping function changes with time during playback of the video image by a playback unit (Column 8, lines 57-67 – column 9 lines 1-9, and Column 6, lines 43-63). It would be obvious to one of ordinary skill in the art at the time of the invention to combine

Art Unit: 3685

the Rhoads ('159)'s in view of Saito's teachings with Chaum ('717) teaching in order to enforce digital rights management systems.

As per claims 64-77,

The Examiner states that Chaum discloses the claimed feature of wherein said warping changes with time during playback of the video image ” (Column 6, lines 43-63). The substitution of another old and well known warping process such as “ The mapping function is selected randomly from among a plurality of mapping functions pre-stored in a playback unit; or the image is distorted by the playback unit by compressing spacing between pixels in one direction and expanding spacing in another direction; or mapping function is changed upon scene change of said video image; or the mapping function is changed in a first manner within a scene, and is changed in a second manner upon a scene change; or mapping function is defined by a geometric transformation; or mapping function is derived by backward warping of a two-dimensional geometric transformation of said video image; or mapping function is derived by a three-dimensional geometric transformation of said video image, or mapping function is linear; or mapping function is quadratic; or mapping function is a spline function; or wherein a motion vector is applied to one or more pixels of said video image for image transformation, or the mapping function is obtained from a stored table, or the mapping function is obtained from a computed table; or wherein different image transformations are performed in different regions of said video image” as disclosed in claims 64-76 are no more than the simple substitutions of one known

Art Unit: 3685

element for another or the mere application of a known technique to a piece of prior art ready for improvement. Ex parte Smith, 83 USPQ2d 1509 (Bd. Pat. App. & Int.

#### **(10) Response to Argument**

The Appellant states that the phrase "not readily visible to a viewer" does not quantify an amount of warping and is therefore indefinite under 35 USC 112 2<sup>nd</sup> paragraph.

The Examiner responds that the limitation "not readily visible by the viewer" does not quantify an amount of "warping" and is therefore indefinite. The term "not readily visible" is a subjective term unique to each individual viewer, Examiner submits that this subjective language fails to limit the claim and is therefore indefinite .

The Appellant states that that the language "will be distorted and the distortion of the composite video image can be seen by the viewer" is not directed towards intended use.

The Examiner responds that the claim language "'will be distorted" and "can be seen by the viewer" are not directed towards positive claim limitations, since the claimed action take place at an arbitrary point in the future. The Examiner submits that these claim limitations are merely a description of the intended result of the claimed process and as such does not have patentable merit. Examiner further notes that the claimed feature of "wherein audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units, is distorted and the distortion of the produced audio information can be heard by a listener of the produced audio information or the distortion of the produced video information can be seen by a

Art Unit: 3685

viewer of the produced video information, said video information comprises a video image embedded in a video data stream, and said video image is distorted during playback by a playback unit in accord with the predetermined mapping function by an amount not readily visible to the viewer, but such that a video image produced by combining multiple video data streams reproduced by multiple different playback units is distorted and the distortion can be seen by the viewer, wherein said warping changes with time during playback of the video image” merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim. (Texas Instruments Inc. v. International Trade Commission 26, USPQ2d 1010 (Fed. Cir. 1993); Griffin v. Bertina, 62 USPQ2d 1431 (Fed. Cir. 2002); Amazon.com Inc. v. Barnesandnoble.com Inc., 57 USPQ2d 1747 (CAFC 2001)

The Appellant states that the prior art fails to disclose the claimed feature of “a means for imparting a prescribed transformation to the video image for warping the video image in a manner, and by an amount, not readily visible to a viewer such that a composite video image produced by multiple video playback units will be distorted and the distortion of the composite video image can be seen by the viewer”

The Examiner responds that Rhoads discloses imparting a “noise” signal into a data stream where the “noise” signal contains copyright information ( column 28, lines 1-28). The Examiner submits that this teaches the claimed feature of "means for imparting a prescribed transformation”. The Examiner further responds that responds that the claim language ““such that a composite video image produced by multiple video playback units will be distorted and the distortion of the composite video image can be seen by the viewer " are not directed towards positive claim limitations, since the claimed action take place at

Art Unit: 3685

an arbitrary point in the future. The Examiner submits that these claim limitations are merely a description of the intended result of the claimed process and as such does not have patentable merit.

The Appellant states that the prior art does not teach "a decoder for decoding the encoded data stream"

The Examiner responds that Saito discloses a dedicated scramble decoder used in conjunction with a digital content management program that monitors a data stream for data indicating illicit usage of the content ( column 7 lines 1-7).

In response to Appellants's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969. In this case the prior art references are directed towards preventing unauthorized usage of media, both Rhoads and Chaum disclose a system of watermarking media such that an illicit copy is readily detectable.

In regard to claims 62-77 the Appellant states that the prior art references fail to disclose the claimed limitation of "such that audio or video information produced by combining

Art Unit: 3685

multiple audio or video data streams corresponding to said information, from different playback units will be perceptibly distorted"

The Examiner further responds that responds that the claim language "'such that audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units will be perceptibly distorted" are not directed towards positive claim limitations, since the claimed action take place at an arbitrary point in the future. The Examiner submits that these claim limitations are merely a description of the intended result of the claimed process and as such does not have patentable merit.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the Examiner in the Related Appeals and Interferences section of this Examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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